Hetis H61 Ultra

Personal Computer

MS-B050 System

G52-B0501X1

Contents

Copyright Notice iii
Trademarks iii
Revision iii
Upgrade and Warranty iv
Acquisition of Replaceable Parts iv
Technical Support iv
Green Product Features v
Environmental Policy v
Safety Instructions vi
CE Conformity viii
FCC-B Radio Frequency Interference Statement viii
WEEE Statement ix

1. Overview 1-1

Packing Contents 1-2
System Overview 1-3
System Specifications 1-8
Component Replacement & Upgrade 1-10

2. Getting Started 2-1

Safety & Comfort Tips 2-2
Connecting Peripheral Devices 2-3
Hardware Setup 2-8

3. System Operations 3-1

System Booting Setup for the first time 3-2
Creating System Recovery Disc 3-3
Network Connection under Windows 3-8
Power Management 3-10
System Recovery 3-12

Copyright Notice

The material in this document is the intellectual property of MICRO-STAR INTERNATIONAL. We take every care in the preparation of this document, but no guarantee is given as to the correctness of its contents. Our products are under continual improvement and we reserve the right to make changes without notice.

Trademarks

All trademarks are the properties of their respective owners.

- MSI is a registered trademark of Micro-Star Int'l Co., Ltd.
- Intel is a registered trademark of Intel Corporation.
- Windows is a registered trademark of Microsoft Corporation.
- Realtek is a registered trademark of Realtek Semiconductor Corporation.
- PS/2 is registered trademark of International Business Machines Corporation.

Revision

Revision	Date
V1.0	2012/ 07

Upgrade and Warranty

Please note that certain components preinstalled in the product may be upgradable or replaceable by user's request. To learn more about upgrade limitation, please refer to the specifications in the User's Manual. For any further information about the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

Acquisition of Replaceable Parts

Please be noticed that the acquisition of replaceable parts (or compatible ones) of the product users purchased in certain countries or territories may be fulfilled by the manufacturer within 5 years at most since the product has been discontinued, depending on the official regulations declared at the time.

Please contact the manufacturer via **http://support.msi.com/** for the detailed information about the acquisition of spare parts.

Technical Support

If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Alternatively, please try the following help resources for further guidance.

- Visit the MSI website for technical guide, BIOS updates, driver updates and other information via **http://www.msi.com/service/download/**
- Contact our technical staff via **http://support.msi.com/**

Green Product Features

- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy

Environmental Policy

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.

- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
- Visit the MSI website and locate a nearby distributor for further recycling information.
- Users may also reach us at gpgreenteam@msi.com for information regarding proper Disposal, Take-back, Recycling, and Disassembly of MSI products.

Safety Instructions

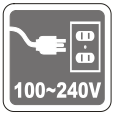
Read the safety instructions carefully and thoroughly.

All cautions and warnings on the equipment or user's manual should be noted.

Keep the User's Guide that comes with the package for future reference.

Keep this equipment away from humidity and high temperature.

Lay this equipment on a reliable flat surface before setting it up.



- Make sure that the power voltage is within its safety range and has been adjusted properly to the value of 100~240V before connecting the equipment to the power outlet. Do not disable the protective earth pin from the plug. The equipment must be connected to an earthed mains socket-outlet.
- Always unplug the AC power cord before installing any add-on card or module to the equipment.
- Always disconnect the AC power cord or switch the wall socket off if the equipment would be left unused for a certain time to achieve zero energy consumption.

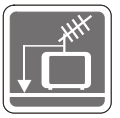
The ventilator on the enclosure is used for air convection and to prevent the equipment from overheating. Do not cover the ventilator.

Do not leave the equipment in an unconditioned environment with a storage temperature above 60°C (140°F) or below 0°C (32°F), which may damage the equipment.

NOTE: The maximum operating temperature is around 35°C.

Never pour any liquid into the opening that could damage or cause electrical shock.

Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.



When installing the coaxial cable to the TV Tuner, it is necessary to ensure that the metal shield is reliably connected to protective earthing system of the building.

Cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable.

Always keep the strong magnetic or electrical objects away from the equipment.

If any of the following situations arises, get the equipment checked by service personnel:

- The power cord or plug is damaged.
- Liquid has penetrated into the equipment.
- The equipment has been exposed to moisture.
- The equipment does not work well or you can not get it work according to user's manual.
- The equipment has dropped and damaged.
- The equipment has obvious sign of breakage.

1. The optical storage devices are classified as CLASS 1 LASER PRODUCT. Use of controls or adjustments or performance of procedures other than those specified is prohibited.
2. Do not touch the lens inside the drive.

廢電池請回收

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

CAUTION:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

CE Conformity

Hereby, Micro-Star International CO., LTD declares that this device is in compliance with the essential safety requirements and other relevant provisions set out in the European Directive.

FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

WEEE Statement

(English) Under the European Union (“EU”) Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of “electrical and electronic equipment” cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

(French) (Français) Au sujet de la directive européenne (EU) relative aux déchets des équipement électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie.

(German) (Deutsch) Gemäß der Europäischen Union (“EU”) Richtlinie über Elektro-und Elektronik-Altgeräte (Richtlinie 2002/96/EG) mit Wirkung vom 13. August 2005, dürfen Elektro- und Elektronikgeräten nicht mehr als Hausmüll entsorgt werden. Der Hersteller verpflichtet sich zur Rücknahme solcher Produkte am Ende ihrer Nutzungsdauer.

(Spanish) (Español) Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como “eléctricos y equipos electrónicos” no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al termino de su período de vida.

(Italian) (Italiano) In base alla Direttiva dell’Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita.

(Russian) (Русский) В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы.

(Turkish) (Türkçe) Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılamayacak ve bu elektonik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır.

(Greek) (Ελληνικά) Σύμφωνα με την Οδηγία 2002/96/ΕΚ της Ευρωπαϊκής Ένωσης («ΕΕ») περί Απόρριψης Ηλεκτρικού και Ηλεκτρονικού Εξοπλισμού (WEEE), η οποία λαμβάνει ισχύ στις 13 Αυγούστου 2005, τα προϊόντα «ηλεκτρικού και ηλεκτρονικού εξοπλισμού» δεν είναι δυνατόν να απορριφθούν πλέον ως κοινά απορρίμματα και οι κατασκευαστές κεκαλυμμένου ηλεκτρονικού εξοπλισμού είναι υποχρεωμένοι να πάρουν πίσω αυτά τα προϊόντα στο τέλος της ωφέλιμης ζωής τους.

(Polish) (Polski) Zgodnie z Dyrektywą Unii Europejskiej (“UE”) dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. “produkty oraz wyposażenie elektryczne i elektroniczne “ nie mogą być traktowane jako śmieci komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycofywany z użycia.

(Hungarian) (Magyar) Az Európai Unió („EU”) 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetőek lakossági hulladékként, és az ilyen elektronikus berendezések gyártói kötelessé válnak az ilyen termékek visszavételére azok hasznos élettartama végén.

(Czech) (Čeština) Podle směrnice Evropské unie (“EU”) o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat “elektrické a elektronické výrobky” v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebírat takové výrobky zpět po skončení jejich životnosti.

(Traditional Chinese) (繁體中文) 歐盟已制訂有關廢電機電子設備法令，亦即自2005年8月13日生效的2002/96/EC，明文規定「電機電子設備產品」不可再以都市廢棄物處理，且所有相關電子設備製造商，均須在產品使用壽命結束後進行回收。

(Simplified Chinese) (简体中文) 欧盟已制订有关废电机电子设备法令，亦即自2005年8月13日生效的2002/96/EC，明文规定「电机电子设备产品」不可再以都市废弃物处理，且所有相关电子设备制造商，均须在产品使用寿命结束后进行回收。

(Japanese) (日本語) 2005年8月13日以降にEU加盟国を流通する電気・電子製品にはWEEE指令によりゴミ箱に×印のリサイクルマークの表示が義務づけられており、廃棄物として捨てることの禁止とリサイクルが義務づけられています。

(Korean) (한국어) 2005년 8월 13일자로 시행된 폐전기전자제품에 대한 유럽연합(“EU”) 지침, 지침 2002/96/EC에 의거하여, “전기전자제품”은 일반 쓰레기로 폐기할 수 없으며 제품의 수명이 다하면 해당 전자제품의 제조업체가 이러한 제품을 회수할 책임이 있습니다.

(Vietnam) (Tieng Viet) Theo Hướng dẫn của Liên minh Châu Âu (“EU”) về Thiết bị điện & điện tử đã qua sử dụng, Hướng dẫn 2002/96/EC, vốn đã có hiệu lực vào ngày 13/8/2005, các sản phẩm thuộc “thiết bị điện và điện tử” sẽ không còn được vứt bỏ như là rác thải đô thị nữa và các nhà sản xuất thiết bị điện tử tuân thủ hướng dẫn sẽ phải thu hồi các sản phẩm này vào cuối vòng đời.

(Thai) (ไทย) ภายใต้ข้อกำหนดของสหภาพยุโรป (“EU”) เกี่ยวกับของเสียจากอุปกรณ์ไฟฟ้าและอิเล็กทรอนิกส์ เลขที่ 2002/96/EC ซึ่งมีผลบังคับใช้ตั้งแต่วันที่ 13 สิงหาคม 2005 ผู้ใช้ไม่สามารถทิ้งผลิตภัณฑ์ที่เป็น “อุปกรณ์ไฟฟ้าและอิเล็กทรอนิกส์” ปะปนกับของเสียทั่วไปของชุมชนได้อีกต่อไป และผู้ผลิตอุปกรณ์อิเล็กทรอนิกส์ดังกล่าวจะถูกบังคับให้นำผลิตภัณฑ์ดังกล่าวกลับคืนเมื่อสิ้นสุดอายุการใช้งานของผลิตภัณฑ์

(Indonesia) (Bahasa Indonesia) Sesuai dengan Regulasi Uni Eropa ("UE") perihal WEEE (Limbah Peralatan Listrik dan Elektronik), Directive 2002/96/EC, yang berlaku sejak 13, 2005, produk "peralatan listrik dan elektronik" tidak lagi dapat dibuang sebagai sampah umum dan pabrik peralatan elektronik diwajibkan untuk mengambil kembali produk tersebut pada saat masa pakainya habis.

(Serbian) (Srpski) Po Direktivi Evropske unije ("EU") o odbačenoj ekektronskoj i električnoj opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja.

(Netherlands) (Nederlands) De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Electrische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling. Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus.

(Romanian) (Română) În baza Directivei Uniunii Europene ("UE") privind Evacuarea Echipamentului Electric și Electronic, Directiva 2002/96/EC, care intră în vigoare pe 13 august, 2005, produsele din categoria "echipament electric și electronic" nu mai pot fi evacuate ca deșeuri municipale, iar fabricanții echipamentului electronic vizat vor fi obligați să primească înapoi produsele respective la sfârșitul duratei lor de utilizare.

(Portuguese) (Português) De acordo com a Directiva 2002/96/EC de Resíduos de Equipamentos Eléctricos e Electrónicos da União Europeia (UE), efectiva desde o 13 de Agosto do ano 2005, os produtos de "equipamento eléctrico e electrónico" não podem ser descartados como resíduo municipal e os fabricantes do equipamento electrónico sujeitos a esta legislação estarão obligados a recolhar estes produtos ao finalizar sua vida útil.

(Swedish) (Svenska) Under Europeiska unionens ("EU") Weee-direktiv (Waste Electrical and Electronic Equipment), Direktiv 2002/96/EC, vilket trädde i kraft 13 augusti, 2005, kan inte produkter från "elektriska och elektroniska utrustningar" kastas i den vanliga hushållssoporna längre och tillverkare av inbyggd elektronisk utrustning kommer att tvingas att ta tillbaka sådan produkter när de är förbrukade.

(Finnish) (Suomi) Euroopan unionin (EU) 13.8.2005 voimaan tulleen sähkö- ja elektroniikkalaiteromua koskevan direktiivin 2002/96/EY mukaisesti "sähkö- ja elektroniikkalaitteita" ei saa enää hävittää talousjätteiden mukana. Direktiivin alaisen sähkö- tai elektroniikkalaitteen valmistajan on otettava laitteet takaisin niiden käyttöiän päättyessä.

(Slovak) (Slovenčina) Na základe smernice Európskej únie („EU") o elektrických a elektronických zariadeniach číslo 2002/96/ES, ktorá vstúpila do platnosti 13. augusta 2005, výrobky, ktorými sú „elektrické a elektronické zariadenia" nesmú byť zneškodňované spolu s komunálnym odpadom a výrobcovia patričných elektronických zariadení sú povinní takéto výrobky na konci životnosti prevziať naspäť.

(Slovenian) (Slovenščina) Skladno z določili direktive Evropske unije ("EU") o odpadni električni in elektronski opremi, Direktiva 2002/96/ES, ki je veljavna od 13. avgusta, izdelkov "električne in elektronske opreme" ni dovoljeno odstranjevati kot običajne komunalne odpadke, proizvajalci zadevne elektronske opreme pa so zavezani, da tovrstne izdelke na koncu njihove življenjske dobe sprejmejo nazaj.

(Danish) (Dansk) I henhold til direktiv fra den europæiske union (EU) vedrørende elektrisk og elektronisk affald , Direktiv 2002/96/EC, som træder i kraft den 13. august 2005, må produkter som “elektrisk og elektronisk udstyr” ikke mere bortskaffes som kommunalt affald. Producenter af det pågældende, elektroniske udstyr vil være forpligtet til at tage disse produkter tilbage ved afslutningen på produkternes levetid.

(Norwegian) (Norsk) Under den europeiske unionens (“EU”) direktiv om deponering av elektronisk og elektrisk utstyr, direktiv 2002/96/EC, som trer i effekt 13. august 2005, kan ikke produkter av “elektronisk og elektrisk ustyr” lenger deponeres som husholdningsavfall og fabrikantene av disse produktene er forpliktet å ta tilbake slike produkter ved slutten av produktets levetid.

(Bulgarian) (български) Според директивата на Европейския съюз относно отпадъците от електрическо и електронно оборудване, директива 2002/96/EC, важаща от 13 август, 2005 г., електрическо и електронно оборудване не може да се изхвърля заедно с битовите отпадъци и производителите на такова оборудване са задължени да приемат обратно съответните продукти в края на експлоатационния им период.

(Croatian) (Hrvatski) U okviru Direktive Europske Unije (“EU”) o Otpadnim električnim i elektroničkim uređajima, Direktiva 2002/96/EC, koja je na snazi od 13. kolovoza 2005., “električni i elektronički uređaji” se ne smiju više bacati zajedno s kućnim otpadom i proizvođači su obvezni zbrinuti takve proizvode na kraju njihovog životnog vijeka.

(Estonia) (Eesti) Vastavalt Euroopa Liidu (“EL”) direktiivile 2002/96/EÜ (elektri- ja elektroonikaseadmete jäätmete kohta), mis jõustus 13. augustil 2005, on keelatud kodumajapidamiste “elektri- ja elektroonikaseadmete” jäätmete hävitamine koos majapidamisjäätmetega, ja elektri- ja elektroonikaseadmete tootjad on kohustatud sellised tooted pärast nende kasutuselt kõrvaldamist tagasi võtma.

(Persian) (فارسی)

اتحادیه اروپا) که از تاریخ 13 آگوست سال 2005 میلادی قابل اجراست ، کلیه شرکت های 2002/96/ECبر طبق قانون دفع زباله های الکتریکی و الکترونیکی (بند تولید کننده موظف به جمع آوری زباله محصولات خود پس از پایان دوره مصرف می باشند.

(Arabic) (العربية)

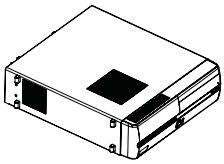
في إطار اتفاقية الإتحاد الأوربي ("الإتحاد الأوربي") التوجيه بشأن نفايات المعدات و الأجهزة الكهربائية والإلكترونية، توجيه 2002/96/EC للمجموعة الأوربية، الذى أصبح ساري المفعول في 13 أغسطس/آب، 2005، ان منتجات "أجهزة كهربائية وإلكترونية" لا يمكن التخلي عنها بوصفها نفايات، ومنتجو المعدات الالكترونية سيكون لزاما عليهم استرداد مثل هذه المنتجات في نهاية مدة صلاحيتها.

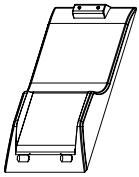
Chapter 1

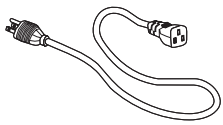
Overview

Congratulations for purchasing the Hetis H61 Ultra (MS-B050) System. This system is your best slim PC choice. With the fantastic appearance and ultrasmall form factor, it can easily be set anywhere. The feature packed platform also gives you an exciting PC experience.

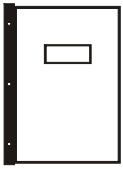
Packing Contents


Hetis H61 Ultra


Stand


AC Power Cord

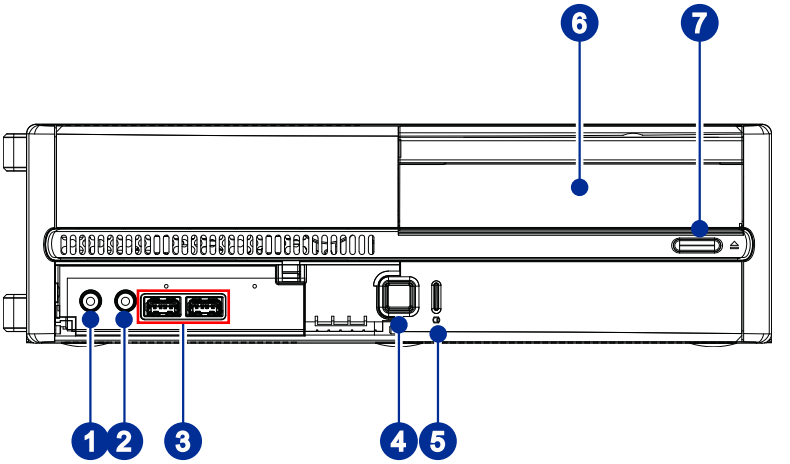
Driver/ Utility Disk


User Manual

** Please contact us immediately if any of the items is damaged or missing.*
** The illustrations are for reference only and your packing contents may slightly vary depending on the model you purchased.*

System Overview

➤ Front View



1 **Headphone Jack**
This connector is provided for headphones or speakers.

2 **Microphone Jack**
This connector is provided for microphones.

3 **USB 3.0 Port**
The USB (Universal Serial Bus) port is for attaching USB devices such as keyboard, mouse, or other USB-compatible devices. It supports up to 5Gbit/s (SuperSpeed) data transfer rate. The USB 3.0 port is backward-compatible with USB 2.0 devices.

4 **Power Button/ LED**
Press the power button to turn the system on and off. The power LED glows when the system is turned on and goes off when the system is shut down. In terms of power saving, the LED blinks in S3 (Suspend to RAM) mode and goes off in S4 (Suspend to Disk) mode. Pressing the system power button will wake the system up from power saving mode.

5 **Hard Disk Drive LED**
This indicator shows the activity status of the HDD. It flashes when the system is accessing data on the HDD and remains off when no disk activity is detected.

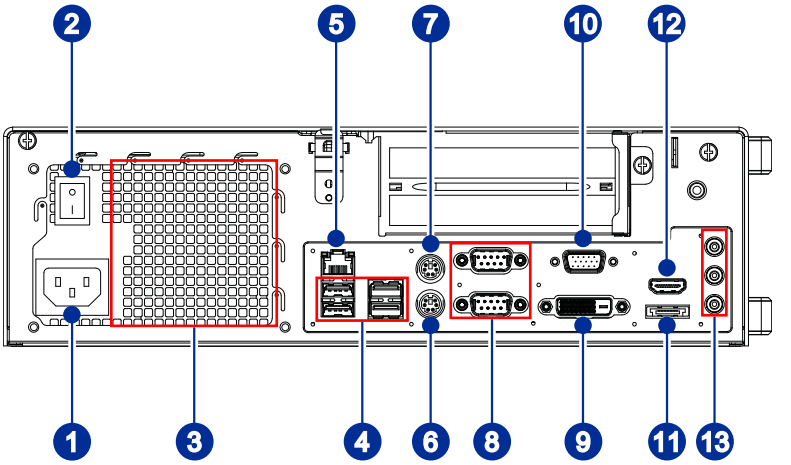
6 **Optical Disk Drive**
A DVD Super-Multi drive is integrated for your home entertainment. (Blu-ray is optional.)

7 **Eject Button**
Press the eject button to open and close the optical disk drive.

Important

High-speed devices are recommended for USB 3.0 ports whereas low-speed devices, such as mouse or keyboard, are suggested to be plugged into the USB 2.0 ports on the rear panel.

➤ Rear View



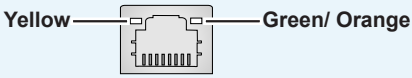
1 **Power Jack**
Power supplied through this jack supplies power to your system.

2 **Power Switch**
Press the power switch to turn the power supply on and off. The “on” position is the solid line and the “off” position is the circle. Make sure the power supply switch to the “on” position before you press the power button to turn on your system.

3 **Ventilator**
The ventilator on the enclosure is used for air convection and to prevent the equipment from overheating. Do not cover the ventilator.

4 **USB 2.0 Port**
The USB (Universal Serial Bus) port is for attaching USB devices such as keyboard, mouse, or other USB-compatible devices. It supports up to 480Mbit/s (Hi-Speed) data transfer rate.

5 **LAN Jack**
The standard RJ-45 LAN jack is provided for connection to the Local Area Network (LAN). You can connect a network cable to it.



LED	Color	LED State	Condition
Left	Yellow	Off	LAN link is not established.
		On (steady state)	LAN link is established.
		On (brighter & pulsing)	The computer is communicating with another computer on the LAN.
Right	Green	Off	10 Mbit/sec data rate is selected.
		On	100 Mbit/sec data rate is selected.
	Orange	On	1000 Mbit/sec data rate is selected.

6 **Keyboard Port**
The standard PS/2 keyboard DIN connector is for a PS/2 keyboard.

7 **Mouse Port**
The standard PS/2 mouse DIN connector is for a PS/2 mouse.

8 **Serial Port (Optional)**
The serial port supports barcode scanners, barcode printers, bill printers, credit card machine, etc.

9 **DVI Port**
The DVI (Digital Visual Interface) connector allows you to connect a LCD monitor. It provides a high-speed digital interconnection between the computer and its display device. To connect an LCD monitor, simply plug your monitor cable into the DVI connector, and make sure that the other end of the cable is properly connected to your monitor (refer to your monitor manual for more information.)

10 **VGA Port**
The DB15-pin female port is provided for monitor.

11 **eSATA Port**
The eSATA (External Serial ATA) port is provided for attaching the eSATA external hard drive.

12 **HDMI Port**
The High-Definition Multimedia Interface (HDMI) is an all-digital audio/video interface capable of transmitting uncompressed streams. HDMI supports all TV format, including standard, enhanced or high-definition video, plus multi-channel digital audio on a single cable.

13 **Audio Jack**
Line-In (Blue) is used for external CD player, tapeplayer or other audio devices.
Line-Out (Green) is used for speakers or headphones.
Mic (Pink) is used for microphones.

System Specifications

Processor

- Intel® Core™ i5, Core™ i3, Pentium® and Celeron® processor in the LGA1155 package (TDP Max 77 W)

Chipset

- Intel® H61 chipset

Memory

- 2 DDR3 DIMM slots (non-ECC)
- Supports Dual-Channel mode
- Supports the maximum of 8GB

LAN

- Supports PCI Express LAN Gigabit Ethernet by Realtek® RTL8111E or Intel® WG82579V (Optional)
- Supports ACPI Power Management
- Compliant with PCI 2.3

Audio

- HDA Codec by Realtek® ALC887
- Flexible 6-channel audio with jack sensing
- Compliant with Azalia 1.0 spec

Input/Output (I/O)

- 5 audio jacks
- 4 USB 2.0 ports
- 2 USB 3.0 ports
- 1 power jack
- 1 power switch
- 1 LAN jack
- 1 mouse port
- 1 keyboard port
- 2 serial ports (Optional)
- 1 DVI port
- 1 VGA port
- 1 HDMI port
- 1 eSATA port

Storage

- 3.5” Hard Disk Drive
- 5.25” Optical Disk Drive

Power Supply

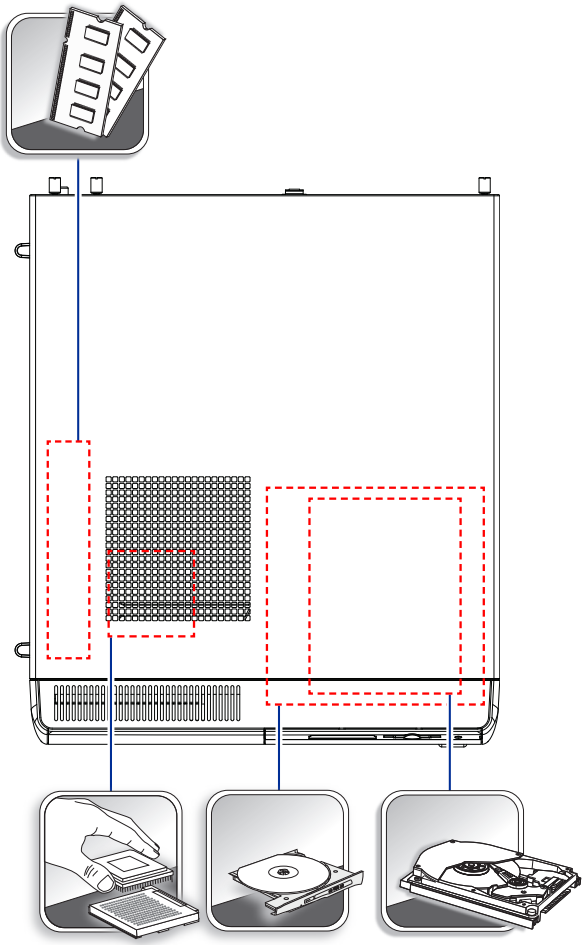
- 270 watt PSU with active PFC (Voltage Value Auto-Switch)

Dimension

- 385 mm (D) x 340 mm (W) x 94 mm (H) (with stand)
- 385 mm (D) x 330 mm (W) x 94 mm (H) (without stand)

Component Replacement & Upgrade

Please note that certain components preinstalled in the product may be upgradable or replaceable by user's request depending on the models users purchased.



To learn more about upgrade limitation, please refer to the specifications in the User's Manual. For any further information on the product users purchased, please contact the local dealer.

Do not attempt to upgrade or replace any component of the product if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

Chapter 2

Getting Started

This chapter provides you with the information on hardware setup procedures. While connecting peripheral devices, be careful in holding the devices and use a grounded wrist strap to avoid static electricity.

Safety & Comfort Tips

The Hetis H61 Ultra is a portable platform that allows you to work anywhere. However, choosing a good workspace is important if you have to work with your PC for a long period of time.

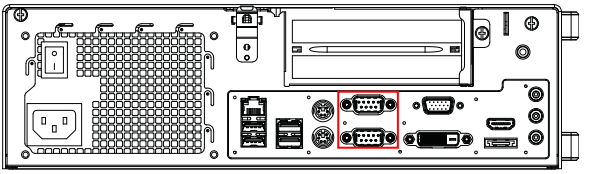
1. Your work area should have enough illumination.
2. Choose the proper desk and chair and adjust their height to fit your posture when operating.
3. When sitting on the chair, sit straight and keep a good posture. Adjust the chair's back (if available) to support your back comfortably.
4. Place you feet flat and naturally on the floor, so that your knees and elbows have the proper position (about 90-degree) when operating.
5. Put your hands on the desk naturally to support your wrists.
6. Avoid using your PC in a place where discomfort may occur (such as on the bed).
7. The Hetis H61 Ultra is an electrical device. Please treat it with great care to avoid personal injury.

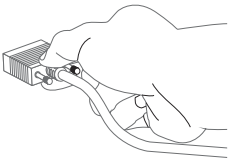
Connecting Peripheral Devices

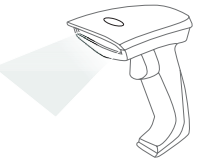
The I/O (input/output) ports on the rear panel allow you to connect peripheral devices. All devices listed here are for reference only.

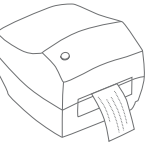
➤ Connecting Serial Devices

Serial ports are commonly used in applications such as industrial automation systems, scientific analysis, shop till systems and some industrial/consumer products. Users may connect barcode scanners, barcode printers, bill printers, and credit card machine to this serial port.







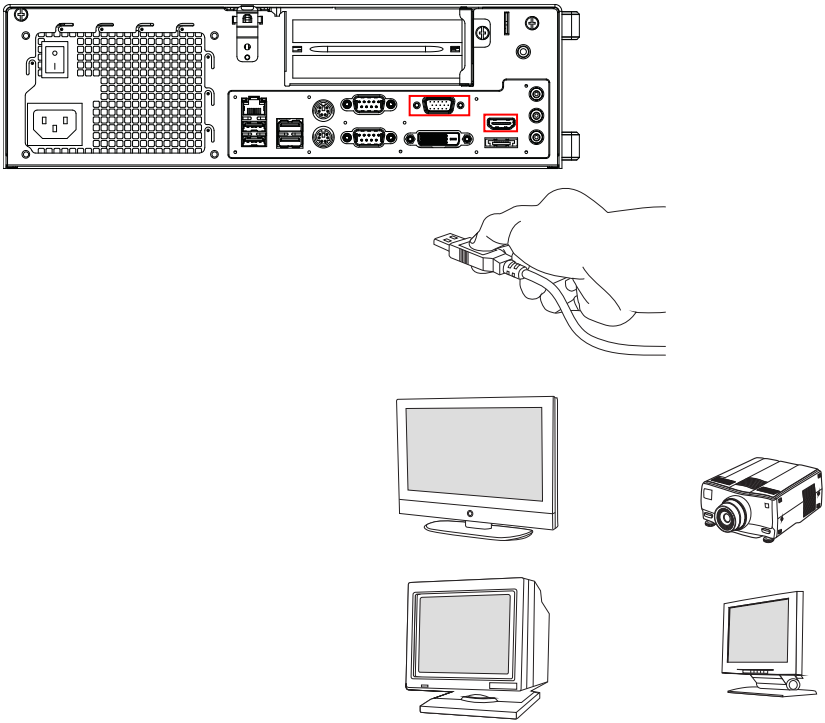


➤ Connecting VGA-Out & HDMI-Out Devices

This Hetis H61 Ultra provides a VGA port and an HDMI port for connection to external monitors, projectors, set-top boxes, DVD players, digital video cameras, mini notebooks, digital cameras, etc.

VGA (Video Graphics Array) is a graphics display system for PCs. VGA connectors and their associated cabling are always used solely to carry analog video signals along with digital clock and data.

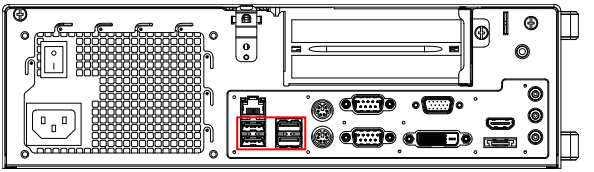
HDMI (High Definition Multimedia Interface) is a new interface standard for PCs, displays and consumer electronics devices that supports standard, enhanced and high-definition video, plus multi-channel digital audio on a single cable.

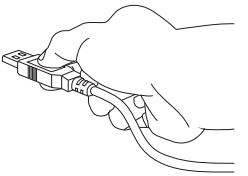


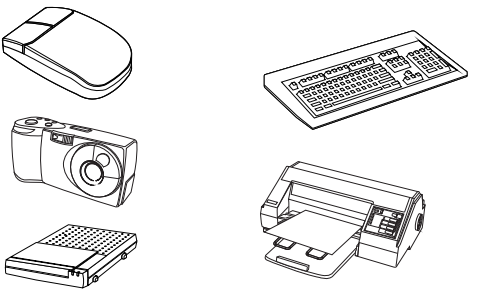
To connect the VGA/ HDMI device, first make sure the Hetis H61 Ultra and the targeted device are both powered off, and then connect the cable of the device to the VGA/ HDMI port of your Hetis H61 Ultra.

➤ Connecting the USB Devices

This Hetis H61 Ultra provides USB ports for connecting various USB devices, such as mouse, keyboard, digital camera, webcam, printer, external optical storage device,.. and etc. To connect these devices, install the drivers for each device first if necessary, and then connect the device to the Hetis H61 Ultra. This Hetis H61 Ultra is capable of auto detecting the USB devices installed, and if there is no detection of the devices, please manually enable the USB devices by going to Start Menu / Control Panel / Add Hardware to add the new device.



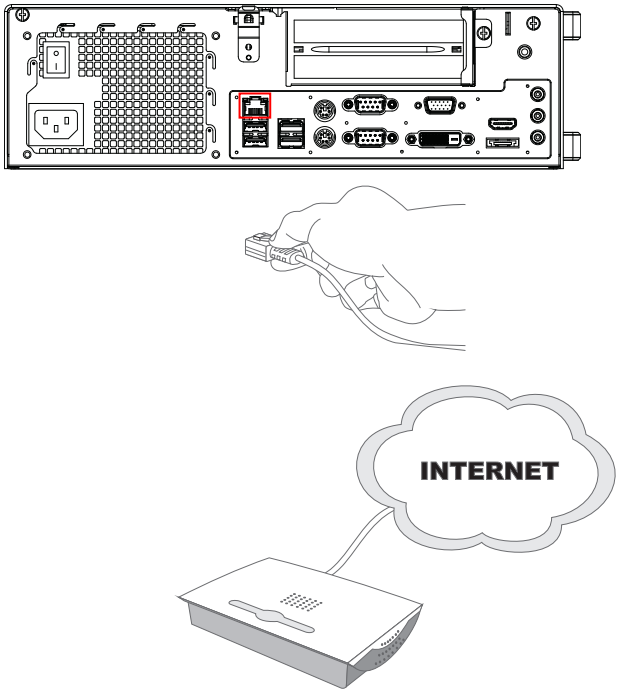




➤ Connecting the Network Device

The RJ-45 connector of the Hetis H61 Ultra allows you to connect the LAN (local area network) devices, such as a hub, switch and gateway, to build a network connection.

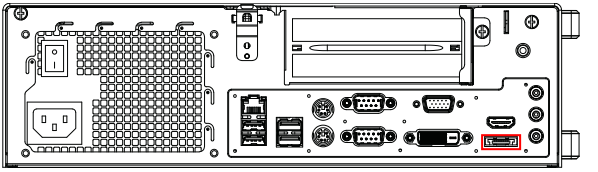
For more instructions or detailed steps on connecting to the LAN, please ask your MIS staff or network manager for help.

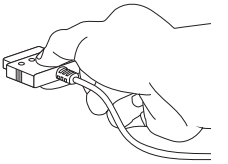


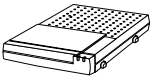
➤ Connecting the External SATA Hard Disk Drive

The eSATA Connector allows you to connect an external Serial ATA hard disk device. The eSATA standard interface supports “plug-and-play” technology, so that you can connect and remove the eSATA devices without turning off the Hetis H61 Ultra.

To connect the eSATA hard disk device, simply connect the cable of the device to the eSATA Connector of your Hetis H61 Ultra.







Hardware Setup

➤ Connecting the AC Power

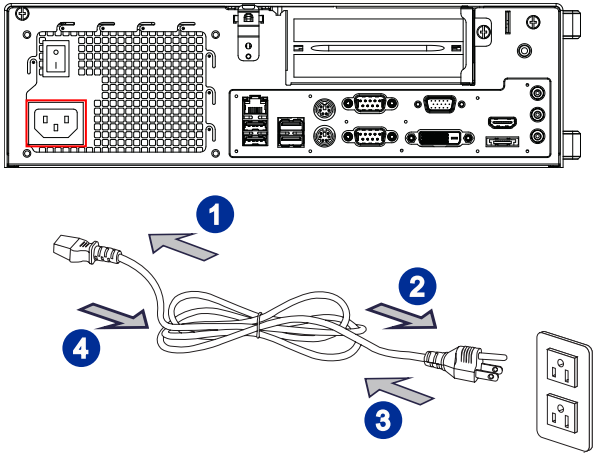
1. Unpack the package to find the AC power cord. Plug one end of the AC power cord to the Hetis H61 Ultra.

2. Plug the male end to the electrical outlet.

➤ Disconnecting the AC Power

3. Unplug the AC power cord from the electrical outlet first.

4. Unplug the AC power cord from the Hetis H61 Ultra.

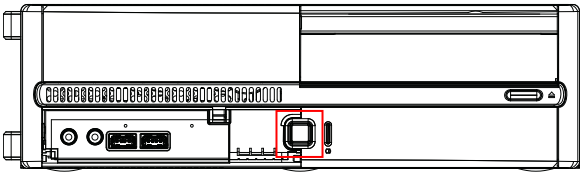


Important

When unplugging the AC power cord, always hold the connector part of the cord. Never pull the cord directly!

➤ Powering on the System

Press the power button to power on the system.



Chapter 3

System Operations

This chapter provides you with essential information on system operations, such as system boot setup, recovery disc creation, network connection, and so on.

Important

- *It is highly recommended that you create a system recovery disc as the backup solution in the event of a catastrophic disk failure or other accidents.*
- *All information is subject to change without prior notice.*

System Booting Setup for the first time

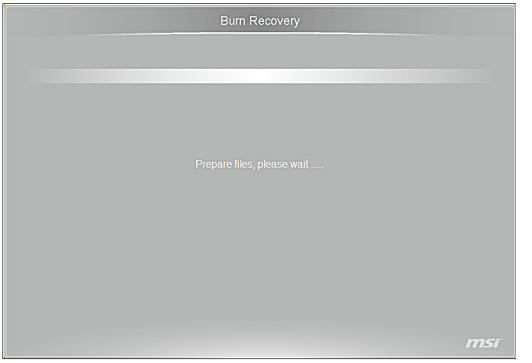
For the first-time use, you will need to go over the following steps to start using your Hetis H61 Ultra. The entire booting setup will take you around 30 minutes.

1. Windows setup starts running. Please wait until Windows setup finishes the progress loading.
2. Select the language of the operating system and click [Next] to continue.
3. Choose the “Country or region”, “Time and currency”, and “Keyboard layout” you need. Click [Next] to continue.
4. Choose a user name for your account and name your computer to distinguish it on the network. Click [Next] to continue.
5. Set a password for your account to protect your user account from unwanted users. (Leave this field blank if no need for password.) Click [Next] to continue.
6. Please read the license terms. Check the “I accept the license terms” box and click [Next] to continue.
7. Select [Use recommended settings] for “Help protect your computer and improve Windows automatically.”
8. Review your time and date settings. Click [Next] to continue.
9. Please choose a wireless network you intend to join from the provided WLAN list. Click [Next] to continue. You may also click [Skip] to skip this step and set up the WLAN later.
10. (Optional) Followingly comes the anti-virus software screen. Click [Agree] to accept the license agreement terms and activate the anti-virus software. Alternatively, choose [Stay Unprotected] and click [Next] to proceed without activating the anti-virus software.
11. The “Software Installation Menu” pops up. Click [Install] to continue.
12. The software is being installed. Please do not turn off the computer when software installation is running. When the progress bar completes loading, click [Finish] to continue.
13. The system enters the Windows 7 OS to start its personalized settings. Get ready to explore your Hetis H61 Ultra after the personalized settings are done. Have fun with it!

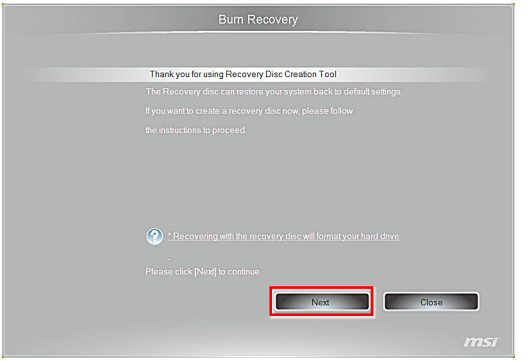
Creating System Recovery Disc

For the first-time use, it is highly recommended that you create a system recovery disc as the backup solution in the event of a catastrophic disk failure or other accidents. Before moving forward, please make sure your system booting setup is complete and go over the following procedures to get it done.

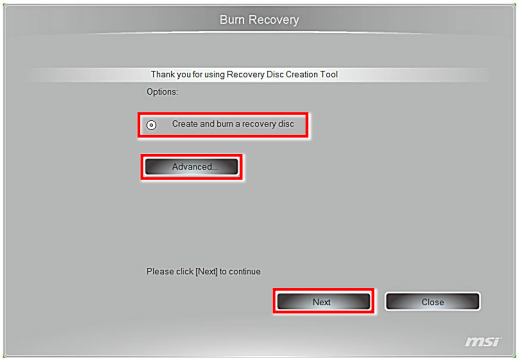
1. Double-click the “BurnRecovery” icon on the desktop to launch the Recovery Disc Creation Tool. Please note that it may take a while for the operating system to prepare recovery files.



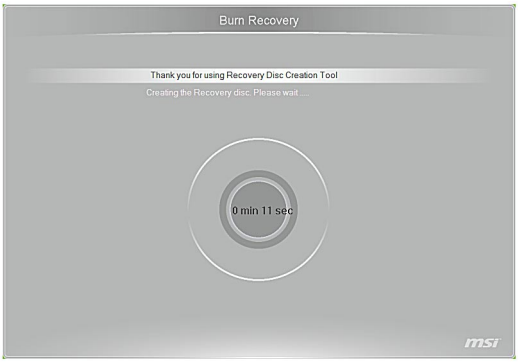
2. Click [Next] to start the image creation of the recovery disc.


Burn Recovery
Thank you for using Recovery Disc Creation Tool
The Recovery disc can restore your system back to default settings.
If you want to create a recovery disc now, please follow
the instructions to proceed.
* Recovering with the recovery disc will format your hard drive.
Please click [Next] to continue.
Next
Close
msi

3. Select [Create and burn a recovery disc] and click [Next] to continue. Alternatively, choose [Advanced] to bring forth advanced options.



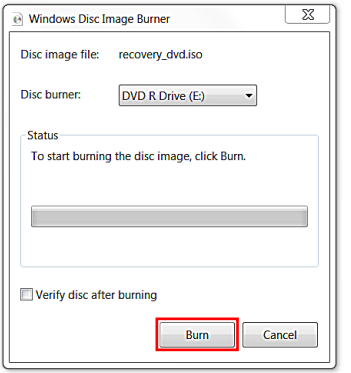
4. The image of recovery disc is being created. It takes some time to finish the processing.

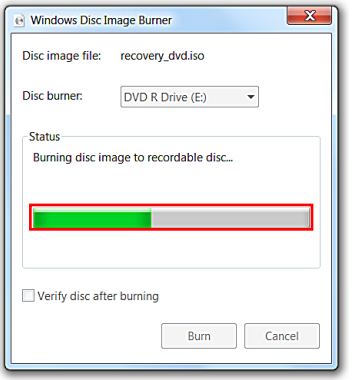


5. Follow the on-screen instructions to prepare enough number of blank DVD discs. Insert the blank DVD disc into the optical disc drive and click [Next] to continue.

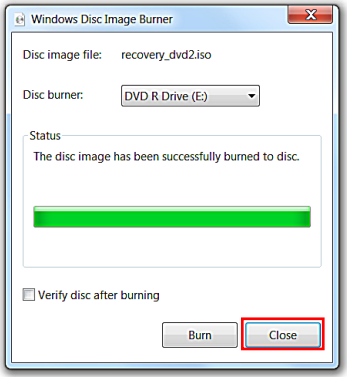
Burn Recovery
Thank you for using Recovery Disc Creation Tool
Please insert the number1 blank writable DVD, and prepare to proceed
the recovery disc creation
3 blank writable DVDs will be required for this operation
Please click [Next] to continue
Next
Close
msi

6. The Windows Disc Image Burner pops up. Click [Burn] to start the burning progress. It takes a while to finish the processing.





7. On completion of the disc creation, click [Close] to exit and take out the disc. Follow the on-screen instructions to create all recovery discs.



8. All recovery discs have been successfully created. Please store the discs carefully and click [Next] to continue.

Burn Recovery
Thank you for using Recovery Disc Creation Tool
The 3 of 3 recovery disc has been successfully created. Please remove the disc and store it properly.
Discs required 3
Discs created 3
Please click [Next] to continue
Next
Close
msi

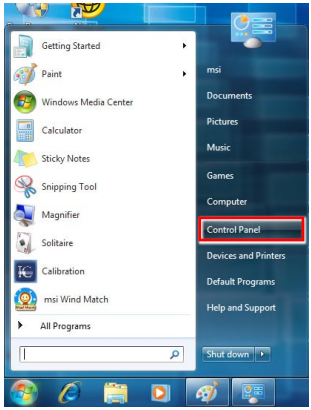
9. Check the following box if you want to remove the temporary files. Click [Finish] to complete recovery disc creation.

Burn Recovery
Thank you for using Recovery Disc Creation Tool
The recovery disc creation has been completed.
Do you want to remove the temporary files?
Finish
msi

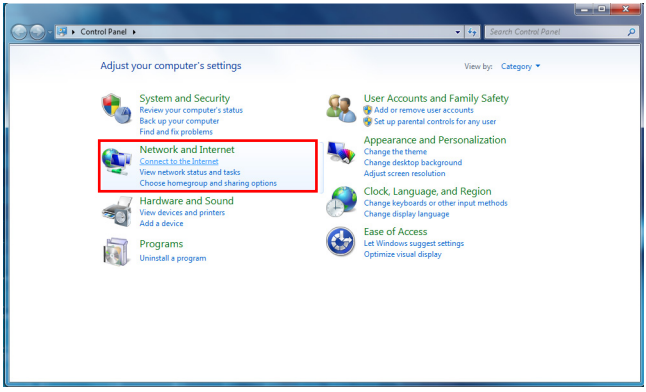
Network Connection under Windows

➤ Wired LAN

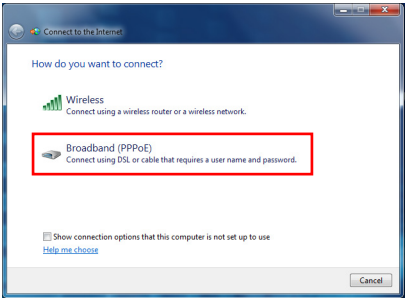
1. Go to [Start] > [Control Panel].



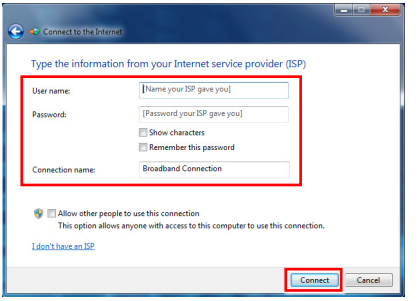
2. Select [Connect to the Internet] under [Network and Internet].



3. Select [Broadband (PPPoE)] to connect using DSL or cable that requires a user name and password.


Connect to the Internet
How do you want to connect?
Wireless
Connect using a wireless router or a wireless network.
Broadband (PPPoE)
Connect using DSL or cable that requires a user name and password.
Show connection options that this computer is not set up to use
Help me choose
Cancel

4. Type the information from your Internet Service Provider (ISP) and click [Connect] to establish your LAN connection.


Connect to the Internet
Type the information from your Internet service provider (ISP)
User name:
Name your ISP gave you]
Password:
[Password your ISP gave you]
Show characters
Remember this password
Connection name:
Broadband Connection
Allow other people to use this connection
This option allows anyone with access to this computer to use this connection.
I don't have an ISP
Connect
Cancel

Power Management

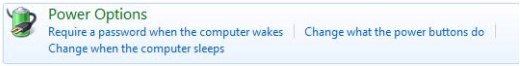
Power management of personal computers (PCs) and monitors has the potential to save significant amounts of electricity as well as deliver environmental benefits.

To be energy efficient, turn off your display or set your PC to sleep mode after a period of user inactivity.

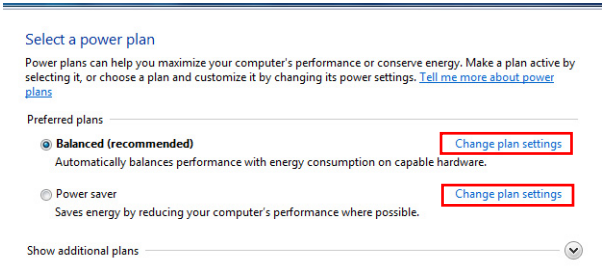
➢ Power Management in Windows OS

- [Power Options] in Windows OS allow you to control the power management features of your display, hard drive, and battery. Go to [Start] > [Control Panel] > [System and Security].

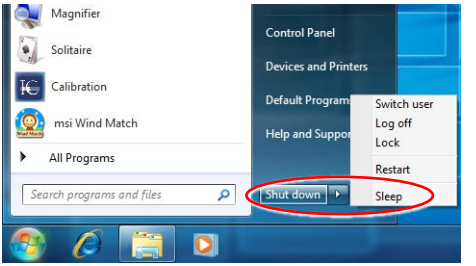
Then click on the [Power Options] link.


Power Options
Require a password when the computer wakes
Change what the power buttons do
Change when the computer sleeps

Select a power plan that suits your personal needs. You may also fine-tune the settings by clicking [Change plan settings].


Select a power plan
Power plans can help you maximize your computer's performance or conserve energy. Make a plan active by selecting it, or choose a plan and customize it by changing its power settings. Tell me more about power plans
Preferred plans
Balanced (recommended)
Change plan settings
Automatically balances performance with energy consumption on capable hardware.
Power saver
Change plan settings
Saves energy by reducing your computer's performance where possible.
Show additional plans

- The Shut Down Computer menu presents the options of Sleep (S3/S4) & Shut Down (S5) for rapid and easy management of your system power.



➤ Power Management through ENERGY STAR qualified monitors (Optional)

The power management feature allows the computer to initiate a low-power or “Sleep” mode after a period of user inactivity. When used with an external ENERGY STAR qualified monitor, this feature also supports similar power management features of the monitor. To take advantage of these potential energy savings, the power management feature has been preset to behave in the following ways when the system is operating on AC power:

- Turn off the display after 15 minutes
- Initiate Sleep after 30 minutes

➤ Waking the System Up

The computer shall be able to wake up from power saving mode in response to a command from any of the following:

- the power button,
- the network (Wake On LAN),
- the mouse,
- the keyboard.

Energy Saving Tips:

- Turn off the monitor by pressing the LCD power button after a period of user inactivity.
- Tune the settings in Power Options under Windows OS to optimize your PC’s power management.
- Install power saving software to manage your PC’s energy consumption.
- Always disconnect the AC power cord or switch the wall socket off if your PC would be left unused for a certain time to achieve zero energy consumption.

System Recovery

Important

The System Recovery Function is only available on systems bundled with Windows OS and MSI utilities by default.

The purposes for using the System Recovery Function may include:

- Restore the system back to the initial status of original manufacturer's default settings.
- When some errors have occurred to the operating system in use.
- When the operating system is affected by virus and is not able to work normally.
- When you want to install the OS with other built-in languages.

Before using the System Recovery Function, please backup the important data saved on your system drive to other storage devices.

If the following solution fails to recover your system, please contact the authorized local distributor or service center for further assistance.

➤ Recovering the System with the F3 Hotkey

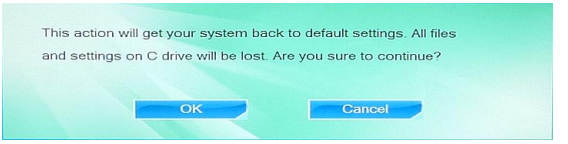
If the system encounters non-recoverable problems, it is always recommended that you try the F3 hotkey to recover your system with the recovery partition of the hard disk drive first.

Follow the instructions below to continue:

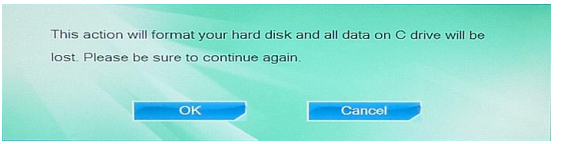
1. Restart the system.
2. Press the F3 hotkey on the keyboard when the following image appears.

3. Select [MSI Recovery Manager] to start the System Recovery Function; or select [EXIT] to restart the system.

4. The System Recovery Function will get your system back to default settings. Press [OK] to confirm.

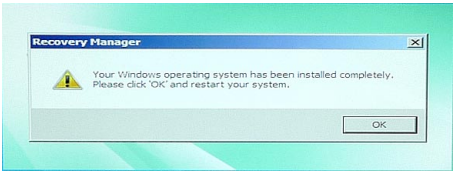

This action will get your system back to default settings. All files and settings on C drive will be lost. Are you sure to continue?
OK
Cancel

5. Press [OK] to reconfirm and start the System Recovery Function. Alternatively, press [Cancel] to stop.



6. The System Recovery Function is proceeding now.

7. The following message indicates successful system recovery. Press [OK] to restart the system and access the Windows operating system as usual.


Recovery Manager
Your Windows operating system has been installed completely.
Please click 'OK' and restart your system.
OK

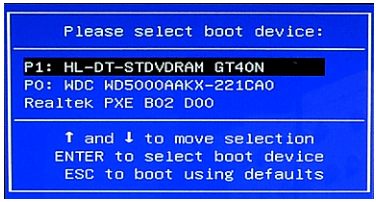
➤ Recovering the System with the Recovery Discs

If the F3 hotkey recovery cannot work, try recovering your system with the recovery discs that you created beforehand.

Follow the instructions below to continue:

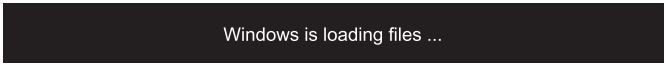
1. Insert the recovery disc into the optical disc drive and restart the system.
2. Press the F11 hotkey on the keyboard when the following image appears.

3. Select the [CD/DVD] device as the boot device and press [Enter] to confirm the selection.

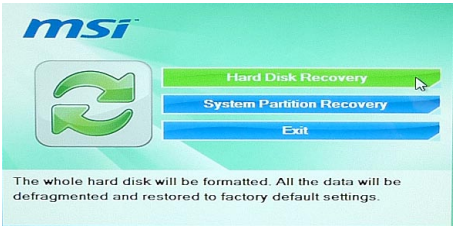

Please select boot device:
P1: HL-DT-STDVDRAM GT40N
P0: WDC WD5000AAKX-221CA0
Realtek PXE B02 D00
↑ and ↓ to move selection
ENTER to select boot device
ESC to boot using defaults

Press any key to reconfirm the selection when the following message appears.

4. The Windows OS starts loading files.



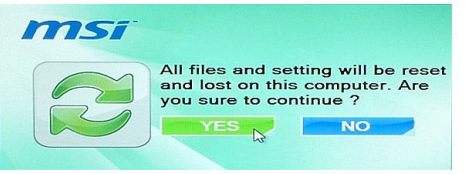
5. The system recovery menu pops up. [Hard Disk Recovery] will format the whole HDD. All data on the HDD will be erased while all settings will be restored to manufacturer default. Select [Hard Disk Recovery] only when your HDD is infected with fatal viruses and no solution can be found except a clear cleanup of the HDD.


msi
Hard Disk Recovery
System Partition Recovery
Exit
The whole hard disk will be formatted. All the data will be defragmented and restored to factory default settings.

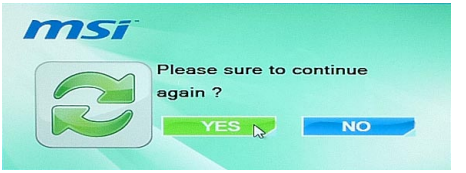
[System Partition Recovery] will format the C drive only. Only the C drive will be restored to manufacturer default. Other drives will not be affected. It is highly recommended that users select [System Partition Recovery] to restore the system.

msi
Hard Disk Recovery
System Partition Recovery
Exit
Only OS_Install drive will be formatted.
Other drives will not be affected.
OS_Install drive will be restored to factory default settings

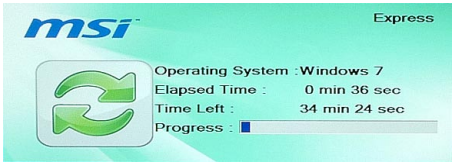
6. The system recovery will format your HDD partition. Make sure that the important data have been backed up. Click [YES] to continue; click [NO] to stop the system recovery.



Click [YES] again to reconfirm; click [NO] to stop the system recovery.



7. DO NOT turn off the system power while performing the system recovery function, or it may cause unknown damage to the system.



8. The following message indicates successful system recovery. Press [OK] to restart the system and access the Windows operating system as usual.

9. If the recovery process is interrupted or failed, please repeat the recovery procedures from the beginning.